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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/528,221

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EXAMINER

FULLER, ROBERT EDWARD

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/528,221	Applicant(s) WATSON ET AL.	
	Examiner ROBERT E. FULLER	Art Unit 3676	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 August 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4,5,7-13,16 and 18-55 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4,8-13,16,18-20,22,24-51,53 and 55 is/are rejected.
- 7) ☒ Claim(s) 5,7,21,23,52 and 54 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 March 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Applicant's submission, filed August 10, 2007, has been carefully considered.

With reference to page 18, paragraph 4 of Applicant's remarks, Examiner acknowledges that claims 19-40 were not explicitly addressed in the Office Action mailed May 10, 2007. It appears that the claim set from the PCT application (PCT/US03/029858) were examined rather than the claims for the National Stage application (10/528,221).

Applicant understandably presumed these claims to be allowable, however Examiner has discovered prior art with which to reject these claims, as well as other claims which were previously indicated as allowable by the Examiner. Accordingly, this Office Action has not been made final. Examiner also notes the addition of drawing objections as well as rejections under 35 U.S.C. 112, 2nd Paragraph.

Drawings

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: 32. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and

informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

3. The drawings are objected to because they do not clearly illustrate the claimed dummy blades interleaved with the cutter blades. Figure 8 attempts to show the second cone and the dummy blades mounted to the second cone. However, Figure 8 is not very clear and does not provide adequate insight as to how the dummy blades function. Furthermore, the specification identifies items 38 and 39 as the pivot points for the cutter blades and the dummy blades, respectively. It seems that the reverse is true, i.e. that 39 is the pivot connection for the cutter blades, and 38 is the pivot point for the dummy blades. However, since the second cone and the dummy blades are not adequately shown, there is no way to verify this. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If

the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

4. The drawings are objected to because Figure 6 illustrates the cutting tool cutting a casing, however, it appears that the cutter blades are actually expanding the casing, rather than cutting it. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

5. The disclosure is objected to because of the following informalities: In paragraph 0025, line 8, the word “messaging” should be changed to --meshing--.

Appropriate correction is required.

Claim Objections

6. Claim 1 is objected to because of the following informalities: There is a lack of antecedent basis for “the expander device” in line 8. Appropriate correction is required.
7. Claims 2 and 49 are objected to because of the following informalities: It is unclear whether “an expander device” is the same as “the expander device” of claim 48. Appropriate correction is required.
8. Claim 4 is objected to because of the following informalities: This claim appears to be redundant, as claim 1 contains the limitations of claim 4. Appropriate correction is required.
9. Claim 42 is objected to because of the following informalities: “411” should be changed to --41--. Appropriate correction is required.
10. Claim 48 is objected to because of the following informalities: There is a lack of antecedent basis for “the expander device” in line 7 on page 16. Appropriate correction is required.

Claim Rejections - 35 USC § 112

11. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
12. Claims 2, 8, 10, 12, 13, 24, 32, 33-40, 41-47, 49, and 55 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In view of the drawing objection above, examiner feels that the illustration (in Figure 8) of the interleaved dummy blades and the second expansion cone is unclear, thereby making these claims difficult to understand. Accordingly, any claims directed to the second expander cone, or the dummy blades stand rejected.

13. Claim 39 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 39 is an apparatus claim which appears to contain the method step of "spacing." This is improper and must be corrected.

Claim Rejections - 35 USC § 102

14. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

15. Claims 1, 4, 9, 11, 16, 18, 19, 20, 22, 25, 26, 33-35, 37-39, 48-51, and 53 are rejected under 35 U.S.C. 102(b) as being anticipated by Beck (US 2,167,739).

With regard to claim 1, Beck discloses a cutter tool for a wellbore casing, comprising: a rotatable tubular support (U); at least one cutter blade (17) supported on the rotatable tubular support, having a retracted position for insertion into the wellbore casing (see Figure 1) and having an expanded position for cutting engagement with the wellbore casing (see Figure 2); and an actuator (25) for moving the cutter blade from the retracted position to the expanded position for cutting engagement with the wellbore

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casing; wherein the cutter blade includes an interior sliding surface and the expander device (L) includes a ramp surface (28) moveable by the actuator along the tubular support in sliding engagement with the interior sliding surface of the cutter blade to pivot the cutter blade between the retracted position and the expanded position (see page 2, column 1, lines 32-44); wherein the at least one cutter blade includes a plurality of cutter blades (17—see page 2, column 1, lines 16-19), each pivotably mounted on the expander device and each having an interior sliding surface and wherein the expander device comprises an expander cone supported on a mandrel portion of the tubular support and having a plurality of ramp surfaces (28) slidably engaged with each interior sliding surface of the plurality of cutter blades (see page 2, column 1, lines 32-44); and wherein the actuator for moving the cutter device from the retracted position to the expanded position further comprises means for selectively activating the actuator to move the cutter blades from the retracted position to the expanded position for cutting engagement with the wellbore casing and from the expanded position to the retracted position (see page 3, column 1, line 66 – page 3, column 2, line 10).

With regard to claim 4, Beck teaches the limitations of this claim as discussed above with respect to claim 1.

With regard to claim 9, Beck discloses cutting tips on the cutter blades.

With regard to claim 11, Beck discloses a method for cutting a wellbore casing comprising: providing a plurality of cutter blades (17) supported on a rotatable tubular support (U); placing the plurality of cutter blades in a retracted position (see Figure 1); inserting the tubular support into the wellbore casing with the cutter blades supported in

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the retracted position; actuating the cutter blades in the wellbore to expand into a cutting position (see Figure 2) to engage with the wellbore casing by moving corresponding ramp surfaces (28) into engagement with the cutter blades; and rotating the tubular support with the cutter blades supported thereon so that the wellbore casing is cut by the rotating cutter blades (see page 1, column 1, lines 29-35).

With regard to claim 16, Beck discloses a cutter tool for a tubular member, comprising: a rotatable tubular support (U); at least one cutter blade (17) supported on the rotatable tubular support, having a retracted position for insertion into the tubular member and having an expanded position for cutting engagement with the tubular member; and an actuator means (25) for moving the cutter blade from the retracted position to the expanded position for cutting engagement with the tubular member, and an expander device (L) means coupled to the actuator means for displacing the cutter blade outwardly. The limitation that the cutter is pivotably mounted to the expander device is not being treated, since the drawings are unclear as to how the cutter is mounted to the expander.

With regard to claim 18, Beck discloses a cutter blade (17) having an interior sliding surface and the expander device means includes a ramp surface (28) moveable by the actuator means along the tubular support in sliding engagement with the interior sliding surface of the cutter blade to pivot the cutter blade between the retracted position and the expanded position.

With regard to claim 19, the at least one cutter blade (17) includes a plurality of cutter blades each having an interior sliding surface and wherein the expander device

means (L) comprises an expander cone means supported on a mandrel portion of the tubular support and having a plurality of ramp surfaces (28) slidably engaged with each interior sliding surface of the plurality of cutter blades. The limitation that the cutter blades are pivotably mounted to the expander device is not being treated, since the drawings are unclear as to how this is possible.

With regard to claims 20 and 22, the actuator means (25) for moving the cutter device from the retracted position to the expanded position further comprises an activation device means (see page 3, column 1, line 66 – page 3, column 2, line 10) for selectively activating the actuator means to move the cutter blade from the retracted position to the expanded position for cutting engagement with the tubular member.

With regard to claim 25, the cutter blades (17) have cutting tips.

With regard to claim 26, Beck discloses a system for cutting a tubular member comprising: means (see Figure 1) for providing a plurality of cutter blades supported on a rotatable tubular support; means (see Figure 1) for placing the plurality of cutter blades in a retracted position; means for inserting the tubular support into the tubular member with the cutter blades supported in the retracted position (see Figure 1); means for actuating the cutter blades in the tubular member to expand into a cutting position to engage with the tubular member (see Figure 2); and means for rotating the tubular support with the cutter blades supported thereon so that the tubular member is cut by the rotating cutter blades (see page 1, column 1, lines 29-34).

With regard to claim 33, Beck discloses a method of cutting a tubular member, comprising: interleaving a plurality of cutting elements (17—see page 2, column 1, line

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8) with a plurality of non-cutting elements (15—see Figure 3); positioning the cutting elements and non-cutting elements within the tubular member; rotating and translating the cutting elements and the non-cutting elements until the cutting elements engage the tubular member; and rotating the cutting elements relative to the tubular member to cut the tubular member.

With regard to claim 34, Beck teaches rotating and translating the cutting elements and the non-cutting elements after cutting the tubular member.

With regard to claim 35, parts of the cutting elements (17) are axially spaced apart from some parts of the non-cutting elements (15).

With regard to claim 37, Beck discloses a system for cutting a tubular member, comprising: means for interleaving a plurality of cutting elements (17) with a plurality of non-cutting elements (15—see Figure 3); means for positioning the cutting elements and non-cutting elements within the tubular member (see Figure 1); means for rotating and translating the cutting elements and the non-cutting elements until the cutting elements engage the tubular member; and means for rotating the cutting elements relative to the tubular member to cut the tubular member (see Figure 1).

With regard to claim 38, this claim is unclear with regard to the non-cutting elements (see the rejection under 35 U.S.C. 112 above), but even so, Beck does disclose means for rotating and translating the cutter elements after cutting the tubular member.

With regard to claim 39, parts of the cutting elements and the non-cutting elements are space axially from each other.

With regard to claim 48, Beck discloses a cutter tool for a wellbore casing, comprising: a rotatable tubular support (U); at least one cutter blade (17) supported on the rotatable tubular support, having a retracted position for insertion into the wellbore casing (see Figure 1) and having an expanded position for cutting engagement with the wellbore casing (see Figure 2); and an actuator (25) for moving the cutter blade from the retracted position to the expanded position for cutting engagement with the wellbore casing; wherein the cutter blade includes an interior sliding surface and the expander device (L) includes a ramp surface (28) moveable by the actuator along the tubular support in sliding engagement with the interior sliding surface of the cutter blade to pivot the cutter blade between the retracted position and the expanded position wherein the cutter blade further comprises a cutting tip secured to the cutter blade projecting radially outward when the cutter blade is in the expanded position for cutting engagement between the cutting tip and the wellbore casing.

With regard to claim 49, Beck's cutters are mounted to an expander device inasmuch as applicant's cutters are mounted to an expander device.

With regard to claim 50, Beck discloses a plurality of cutter elements (17--see page 1, column 2, line 18).

With regard to claims 51 and 53, Beck discloses an activation device and a means for selectively activating (see page 3, column 1, line 66 – page 3, column 2, line 10) the cutter tool.

16. Claims 27-31 are rejected under 35 U.S.C. 102(b) as being anticipated by Stone (US 1,485,642).

With regard to claim 27, Stone discloses a system for radially expanding cutter blades for cutting a tubular member in a preexisting structure, comprising: means for supporting the expandable tubular member using a tubular support member (9) and an expandable cutter tool (see Figure 1); means for injecting a fluidic material into the tubular support member; and means for actuating the expandable cutter tool radially outwardly relative to the tubular member and into cutting engagement with the tubular member using the injected fluidic material (see page 1, lines 27-32 and 36-43).

With regard to claims 28 and 29, Stone discloses means for rotating and raising the cutter tool, which are a conventional surface drill rig (see page 2, lines 15-17).

With regard to claim 30, Stone discloses actuating means comprising means for directing the fluidic material from within a portion of the tubular support member to an actuator cylinder (39) to cause the cutting tool to slide axially on ramp surfaces (17) so that cutting blades are moved radially outwardly.

With regard to claim 31, Stone discloses an upper (4) tubular support and a lower (16) tubular support that move relative to each other.

Allowable Subject Matter

17. Claims 5, 7, 21, 23, 52, and 54 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

18. Claims 10, 12, 32, and 41-47 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

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19. Claims 2, 8, 13, 24, 36, 40, and 55 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Response to Arguments

20. Applicant's arguments with respect to claims 1, 10, 11, 12, 16, 26, 27, 32, 33, 37, 41, and 48 have been considered but are moot in view of the new ground(s) of rejection.

Examiner understands that applicant merely tried to add allowable subject matter into the independent claims, however that subject matter is no longer deemed allowable.

Conclusion

21. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The cited references provide further examples of casing cutter tools.

22. Any inquiry concerning this communication or earlier communications from the examiner should be directed to ROBERT E. FULLER whose telephone number is (571)272-0419. The examiner can normally be reached on Monday thru Friday from 8:00 AM - 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jennifer H. Gay can be reached on 571-272-7029. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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/Jennifer H Gay/
Supervisory Patent Examiner, Art
Unit 3676

08/01/2008
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